July 2014



# Municipality of Anchorage

3000 Arctic Blvd• Anchorage, Alaska 99503-3898 • Telephone (907) 564-2799 • Fax (907) 786-5681 http://www.muni.org • http://www.awwu.biz



Anchorage Water & Wastewater Utility

Board Chair Tim Sullivan

August 8, 2014

Director, Office of Water U.S. Environmental Protection Agency, Region 10 NPDES Compliance Unit 1200 Sixth Avenue, OW-133 Seattle, Washington 98101

Subject: Whole Effluent Toxicity Testing Results

2<sup>nd</sup> Quarter 2014

NPDES Permit No. AK-002255-1

The John M. Asplund Water Pollution Control Facility permit requires that quarterly whole effluent toxicity (WET) testing reports be submitted with the discharge monitoring report (DMR) for the month following the test month. The enclosed report outlines test results for the short-term chronic toxicity test conducted for the second quarter of 2014 (24-hour composite sample collected June 11th, 2014). Effluent flow on the sampling day for this WET test sample was 27.48 MGD.

The permit requires that testing continue with the most sensitive species after an annual screening using three species. This quarter's test used the most sensitive species as demonstrated by the screening of all three species in first quarter 2014. The WET testing consisted of a fertilization test using the purple sea urchin (*Strongylocentrotus purpuratus*). The permit toxicity trigger of 143TUc was not exceeded in this test with a reported chronic toxicity of 35.7 TUc.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system. or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

I can be contacted at (907) 564-2799 or <u>mailto:David.Persinger@awwu.biz</u> should you have any questions.

Sincerely.

David Persinger, P.E.

Director, Treatment Division - AWWU

Cc: Alaska Department of Environmental Conservation, Division of Water

Rob Gustafson, Water Quality Supervisor, AWWU

Jeff Axman, Acting Superintendent, John M. Asplund WPCF, AWWU

Enclosure: Pacific EcoRisk, WET test report

Community, Security, Prosperity

#### PERMITTEE NAME/ADDRESS

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

## DISCHARGE MONITORING REPORT (DMR)

NAME: ANCHORAGE, MUNICIPALITY OF

ADDRESS: 3000 ARCTIC BLVD.

ANCHORAGE, AK 99503-3898

AK0022551 PERMIT NUMBER

personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for

submitting false information, including the possibility of fine and imprisonment for knowing

belief, true, accurate, and complete. I am aware that there are significant penalties for

ring the information, the information submitted is, to the best of my knowledge and

001 A
DISCHARGE NUMBER

No Comment regarding the WET Report although me was mailed

907

AREA

CODE

SIGNATURE OF PRINCIPAL EXECUTIVE

OFFICER OR AUTHORIZED AGENT

564-2799

NUMBER

14

YEAR

80

MONTH

Form Approved.

OMB No. 2040-0004

9503

\*\*\*

before completing this form

FACILITY: JOHN M. ASPLUND WWTF----301 (H

LOCATION: ANCHORAGE AK 99502
ATTN: J. Brett Jokela, P.E., GENERAL MGR. AWWU

| MONITORING PERIOD | YEAR | MO | DAY | | TO | 14 | 07 | 31 |

PARAMETER QUANTITY OR LOADING QUALITY OR C FREQUENCY SAMPLE NO. **AVERAGE** MAXIMUM MINIMUM UNITS **AVERAGE** MAXIMUM UNITS EX OF ANALYSIS TYPE TEMPERATURE, WATER SAMPLE FOUR/ \*\*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\* 15.5 N/A GRAB DEG. CENTIGRADE MEASUREMENT WEEK Deg C 00010 1 0 0 PERMIT REPORT FOUR/ \*\*\*\* \*\*\*\*\* \*\*\* \*\*\*\* **GRAB EFFLUENT GROSS VALUE** REQUIREMENT MAXIMUM WEEK TEMPERATURE, WATER SAMPLE FOUR/ \*\*\*\* \*\*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*\* 16.6 N/A GRAB DEG. CENTIGRADE MEASUREMENT WEEK Dea C 00010 G 0 0 PERMIT REPORT FOUR/ \*\*\*\* \*\*\*\* \*\*\*\* \*\*\* \*\*\*\*\* GRAB RAW SEW/INFLUENT REQUIREMENT **MAXIMUM** WEEK OXYGEN, DISSOLVED SAMPLE FOUR/ \*\*\*\*\* \*\*\*\* \*\*\*\* \*\*\*\*\* \*\*\*\*\* 0.7 GRAB (DO) MEASUREMENT WEEK MG/L 00300 1 0 0 PERMIT REPORT FOUR/ \*\*\*\* \*\*\*\*\* \*\*\*\* \*\*\*\*\* \*\*\*\* GRAB EFFLUENT GROSS VALUE REQUIREMENT MO MIN WEEK BOD, 5-DAY SAMPLE FOUR/ \*\*\*\* 35,980 42.025 162 190 0 COMP24 (20 DEG. C) MEASUREMENT WEEK LBS/DAY MG/L 00310 1 0 0 PERMIT 72100 90100 240 300 FOUR/ \*\*\*\* COMP24 **EFFLUENT GROSS VALUE** REQUIREMENT MO AVG DAILY MX MO AVG DAILY MX WEEK BOD, 5-DAY SAMPLE FOUR/ 64,171 \*\*\*\*\* \*\*\*\* >301 \*\*\*\* COMP24 (20 DEG. C) MEASUREMENT WEEK LBS/DAY MG/L 00310 G 0 0 PERMIT REPORT REPORT FOUR/ \*\*\*\*\* \*\*\*\* \*\*\*\* COMP24 RAW SEW/INFLUENT REQUIREMENT MO AVG MO AVG WEEK BOD, 5-DAY SAMPLE FOUR/ \*\*\*\*\* 37,341 \*\*\*\*\* 170 COMP24 (20 DEG. C) MEASUREMENT WEEK LBS/DAY MG/L 00310 W 0 0 PERMIT 75100 250 FOUR/ \*\*\*\* \*\*\*\*\* \*\*\*\*\* COMP24 EFFLUENT GROSS VALUE REQUIREMENT WKLY AVG WKLY AVG WEEK PH SAMPLE FOUR/ \*\*\*\*\* \*\*\*\*\* \*\*\* 6.8 \*\*\*\*\* 7.3 0 **GRAB** MEASUREMENT WEEK SU 00400 1 0 0 PERMIT 6.5 8.5 FOUR/ \*\*\*\* \*\*\* \*\*\*\*\* **GRAB** EFFLUENT GROSS VALUE REQUIREMENT MINIMUM MAXIMUM WEEK NAME/TITLE PRINCIPAL EXECUTIVE OFFI | centrly under penalty of law that this document and all attachments were prepared under my TELEPHONE DATE firection or supervision in accordance with a system designed to assure that qualified

COMMENT AND EXPANATION OF ANY VIOLATIONS (Reference all attachments here)

David Persinger, P.E.

**Director. Treatment Division** 

TYPED OR PRINTED

The final effluent autosampler is normally taken off line on Saturdays, Mondays, and Wednesdays for line cleaning and pigging for approximately 0.75 hours each time; the composite samples for BODs TSS, etc. may therefore be slightly less than a 24HC on these days.

07

DAY

### NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)

Form Approved. OMB No. 2040-0004

NAME:

ATTN:

ANCHORAGE, MUNICIPALITY OF

ADDRESS: 3000 ARCTIC BLVD.

ANCHORAGE, AK 99503-3898

AK0022551 PERMIT NUMBER

001 A DISCHARGE NUMBER

FACILITY: JOHN M. ASPLUND WWTF----301 (H LOCATION: ANCHORAGE

AK 99502

J. Brett Jokela, P.E., GENERAL MGR. AWWU

MONITORING PERIOD YEAR MO DAY YEAR MO DAY 07 01 FROM 14 TO 07 31

DMR MAILING ZIP CODE: 99503

MAJOR (SUBR02)

External Outfall

NO DISCHARGE

NOTE: Read instructions before completing this form

PARAMETER		QUANTITY (	QUANTITY OR LOADING		QUAL	TY OR CONCENTRATION				FREQUENCY	SAMPLE
		AVERAGE	MUMIXAM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX	OF ANALYSIS	TYPE
PH	SAMPLE MEASUREME	MT	*****	****	7.0	*****	7.6		N/A	FOUR/ WEEK	GRAB
00400 G 0 0 RAW SEW/INFLUENT	PERMIT REQUIREME	NT conse	*****	保管杂集	REPORT MINIMUM	*****	REPORT MAXIMUM	SU		FOUR/ WEEK	GRAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREME	The state of the s	16,453	LBS/DAY	有力有效效力	60	72	MOU	0	FOUR/ WEEK	COMP24
00530 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREME	51000 NT MO AVG	57000 DAILY MX	LBS/DAY	*****	170 MO AVG	190 DAILY MX	MG/L		FOUR/ WEEK	COMP24
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREME		杂杂妆杂杂妆	LBS/DAY	****	313	*****	MG/L	0	FOUR/ WEEK	COMP24
00530 G 0 0 RAW SEW/INFLUENT	PERMIT REQUIREME	REPORT MO AVG	*****		*****	REPORT MO AVG	*****			FOUR/ WEEK	COMP24
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREME	****** NT	13,693	LBS/DAY	*****	*****	63	MG/L	0	FOUR/ WEEK	COMP24
00530 W 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREME	******	54000 WKLY AVG		****	*****	180 WKLY AVG			FOUR/ WEEK	COMP24
0610 1 0 0	SAMPLE MEASUREME	NT *****	*****	2404	****	22.4	498000		N/A	ONCE/ MONTH	COMP24
	PERMIT REQUIREME	******	*****	异妆杂类	******	REPORT MO AVG	******	MG/L		ONCE/ MONTH	COMP24
FECAL COLIFORM, MPN EC MED, 44.5C 31615 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREME	*****	*****	***	****	<5	*****	MPN/	0	THREE/ WEEK	GRAB
	PERMIT REQUIREME	****** NT	*****	***	*****	850 MO GEO	*****	100ML		THREE/ WEEK	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREME	NT 27.235	*****	MGD	****	*****	****	2005	N/A	CONT	RCORDR
	PERMIT REQUIREME	REPORT MO AVG	*****		*****	*****	****			CONT	RCORDR
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David Persinger, P.E.  Director, Treatment Division		rsonnel properly gather and evaluate e person or persons who manage the thering the information, the information	the information submitted. Ba system, or those persons dire on submitted is, to the best of	ssed on my inquiry of ectly responsible for my knowledge and	5		907 56	64-2799	14	08	07
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COMMENT AND EXPANATION OF ANY VIOLATIONS (Reference all attachments here)

There was 1 Sanitary Sewer Overflows(SSO) during this reporting period. The SSO(s) were reported verbally within 24 hours to the appropriate regulatory officials. See attached copies of SSO reporting forms for more details regarding each specific SSO.

LOCATION: ANCHORAGE

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

MONITORING PERIOD

### DISCHARGE MONITORING REPORT (DMF

Form Approved. OMB No. 2040-0004

NAME:

ANCHORAGE, MUNICIPALITY OF

AK 99502

ADDRESS: 3000 ARCTIC BLVD.

ANCHORAGE, AK 99503-3998

FACILITY: JOHN M. ASPLUND WWTF----301 (H

AK0022551 PERMIT NUMBER

YEAR MO DAY

001 A DISCHARGE NUMBER

DAY

YEAR MO

DMR MAILING ZIP CODE: 99503

MAJOR

(SUBR02) External Outfall

NO DISCHARGE

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO.	FREQUENCY	SAMPLE
		AVERAGE	MUMIXAM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX	OF ANALYSIS	TYPE
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMEN	*****	****	****	*****	****	0.6		0	EVERY 3 HRS	GRAB
50060 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMEN	*****	*****	****	*****	*****	1.2 DAILY MX	MG/L		EVERY 4 HRS	GRAB
BOD, 5-DAY PERCENT REMOVAL 81010 K 0 0 PERCENT REMOVAL SOLIDS, SUSPENDED REMOVAL	SAMPLE MEASUREMEN	4T	*****	****	46	****	*****	%	N/A	Monthly	CALCTE
	PERMIT REQUIREMENT	т ******	****	***	REPORT MO AVG	*****	*****			Monthly	CALCTE
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COMMENT AND EXPANATION OF A	NY VIOLATIONS (Re	ference all attachments he	re)				1		-	•	4



Gary Lawley Kinnetic Laboratories, Inc. 1102 West 7th Avenue Anchorage, AK 99501

July 11, 2014

## Gary,

I have enclosed our report "NPDES Compliance Toxicity Testing of the City of Anchorage John M. Asplund Water Pollution Control Facility Effluent". This evaluation consisted of performing the US EPA echinoderm sperm fertilization short-term chronic toxicity test with the purple urchin, Strongylocentrotus purpuratus, using an effluent sample collected June 11, 2014. A summary of the results of this testing follows:

Chronic Effects of Anchorage Effluent on Purple Urchin Sperm Fertilization There were <u>no</u> significant reductions in echinoderm sperm fertilization at the effluent concentrations tested; the NOEC was 2.8% effluent, resulting in 35.7 TUc.

If you have any questions regarding the performance and interpretation of this test, please contact my colleagues Dr. Scott Ogle or Alison Briden at (707) 207-7760.

## Sincerely,

Stevi Vasquez 2014.07.14 09:46:53 -08'00'

Stevi Vasquez Aquatic Ecotoxicologist



Pacific EcoRisk is accredited in accordance with NELAP (ORELAP ID 4043). Pacific EcoRisk certifies that the test results reported herein conform to the most current NELAP requirements for parameters for which accreditation is required and available. Any exceptions to NELAP requirements are noted, where applicable, in the body of the report. This report shall not be reproduced, except in full, without the written consent of Pacific EcoRisk. This testing was performed under Lab Order 22580.

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